



Exemption §106.492 Checklist (Previously Standard Exemption 80)

Smokeless Gas Flares

YOU MUST SUBMIT A PI-7 WITH REQUIRED ATTACHMENTS BEFORE CONSTRUCTION OR OPERATION IF THE GAS BURNED IN THE FLARE HAS A SULFUR OR CHLORINE CONCENTRATION GREATER THAN 24 PPMV.

The following checklist is designed to help you confirm that you meet Exemption §106.492, previously standard exemption 80, requirements. **Any "no" answers indicate that the claim of exemption may not meet all requirements for the use of Exemption §106.492, previously standard exemption 80.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

<u>YES</u>	<u>NO</u>	<u>NA</u>	<u>DESCRIPTION</u>
—	—	—	Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§106.4 checklist is available)?
—	—	—	Is the flare equipped with a tip designed to provide good mixing with air, flame stability and a tip velocity less than 60 ft/sec for gases having a lower heating value less than 1,000 BTU/ft ³ , or less than 400 ft/sec for gases with a LHV greater than 1,000 BTU/ft ³ ? Attach a description including BTU content and tip velocity (Table 8 is available).
—	—	—	Is the flare equipped with a continuously burning pilot or other automatic ignition system that assures gas ignition whenever vents are directed to the flare? Attach a description of the system.
—	—	—	If the flare emits more than 4 #/hr of reduced sulfur compounds, excluding sulfur oxides, is it equipped with an alarm system that immediately notifies appropriate personnel when the ignition system ceases functioning? Attach a description of the system.
—	—	—	If the flare emits less than 4 #/hr of reduced sulfur compounds and is not equipped with an alarm system, does the stack height meet the requirements of condition (d) of §106.352, previously standard exemption STDX 66? Required height: ___. Actual height ___.
—	—	—	If the flare burns gases containing more than 24 ppmv of sulfur, chlorine or compounds containing either element, is it located at least 1/4 mile from any recreational area, residence, or other structure not occupied or used solely by the owner or operator of the flare or owner of the property where the flare is located? Attach a scaled map.
—	—	—	If the flare emits HCl, does the heat release (BTU/hr based on lower heating value) equal or exceed $2.73 \times 10^5 \times \text{HCl emission rate (lb/hr)}$? Attach calculations.
—	—	—	If the flare emits SO ₂ , does the heat release (BTU/hr based on lower heating value) equal or exceed $0.53 \times 10^5 \times \text{SO}_2 \text{ emission rate (lb/hr)}$? Attach calculations.
—	—	—	Will you limit the flare to burning only combustible mixtures of gases containing only carbon, hydrogen, nitrogen, oxygen, sulfur, chlorine, or compounds derived from these elements?
—	—	—	Will the gas mixture always have a net or lower heating value of at least 200 BTU/ft ³ prior to addition of air?
—	—	—	Do you understand and will you ensure that liquids shall never be burned in the flare?